"Maximum for monthly average," which read,

"1,2-Dichloroethane—58—22
1,1,1-Trichloroethane—54—21"

are revised to read as follows:

"1,1-Dichloroethane—58—22
1,1,2-Trichloroethane—54—21."

Appendix A to Part 414 [Amended]

2. In Part 414 Appendix A, the third item under "Lead" which reads, "Anti-knock fuel additive/Blending purchased tetraethyl lead & tetramethyl lead additives" is removed.

Appendix B to Part 414 [Amended]

3. In Part 414 Appendix B, the second item under "Chromium" which reads, "Vat Dyes/Mixing purchased dyestuffs (Anthraquinones, polycyclic Quinones and Indigoids)" is revised to read as follows: "Vat dyes."

4. In Part 414 Appendix B, the second item under "Copper" which reads, "Vat Dyes/Mixing purchased dyestuffs (Anthraquinones, polycyclic Quinones and Indigoids)" is removed.

§ 414.91 [Amended]

5. In § 414.91, row 29 in the table for "Effluent characteristics, Maximum for any one day," and "Maximum for monthly average," which reads, "Bis (2-chloroisopropyl) ether—757—301," is removed.

§ 414.101 [Amended]

6. In § 414.101, row 25 in the table for "Effluent characteristics, Maximum for any one day," and "Maximum for monthly average," which reads, "Bis (2-chloroisopropyl) ether—794—196," is removed.

[FR Doc. 89-15418 Filed 6-28-89; 8:45 am]
BILLING CODE 6560-50-M

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40 CFR Part 799

[OPTS-42113; FRL-3609-2]

Technical Amendments to Test Rules and Consent Orders

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: Pursuant to 40 CFR 790.55 and 790.68, EPA has approved by letter certain modifications to test standards and schedules for chemical testing programs under section 4 of the Toxic Substances Control Act (TSCA). These modifications, requested by test sponsors, will be incorporated and codified in the respective test regulation or consent order. Because these modifications do not significantly alter the scope of a test or significantly change the schedule for its completion, EPA approved these requests without seeking notice and comment. EPA will annually publish a notice describing all of the modifications granted by letter for the previous year. This is the first such annual notice.

EFFECTIVE DATE: This rule is effective on June 29, 1989.

FOR FURTHER INFORMATION CONTACT: Michael M. Stahl, Director, TSCA Assistance Office (TS-799), Office of Toxic Substances, Rm. EB-44, 401 M St., SW., Washington, DC 20460, (202) 554-1404, TDD (202) 554-0551.

SUPPLEMENTARY INFORMATION: EPA issued an interim final rule published in the Federal Register of September 30, 1987 (52 FR 36569), amending procedures for modifying test standards and schedules for test rules and testing consent orders under section 4 of TSCA. The amended procedures allow EPA to approve requested modifications which do not alter the scope of a test or significantly change the schedule for its completion. These modifications were approved by letter without the need for public comment. The rule also requires immediate placement of these letters in EPA's public files and publication of these modifications in the Federal Register. This document includes modifications approved through October 1, 1988. For a detailed description of the rationale for these modifications, refer to the submitters' letters and EPA's responses in the public record for this rulemaking.

I. Discussion of Modifications

Each chemical discussed in this rule is identified by a specific docket number. Copies of correspondence relating to these modifications may be found in docket number (OPTS-42113) or the chemical-specific docket established for this rule. The chemicals and docket numbers are:

Anthraquinone (CAS No. 84-65-1)	[OPTS-42113/42076B]
Biphenyl (CAS No. 92-52-4)	[OPTS-42113/42031D]
1,2,4,5-Tetrachloroberzene (CAS No. 95-94-3	[OPTS-42113/47002I]
Cresols (CAS Nos. 95-48-7, 108-39-4, and 106-44-5)	[OPTS-42113/42033E]
1,2-Dichloropropane (CAS No. 78-87-5)	[OPTS-42113/42043D]
Diethylenetriamine (CAS No. 111-40-0)	[OPTS-42113/42012F]
Diethylene glycol butyl ether and diethylene glycol butyl ether acetate (CAS Nos. 112-34-5 and 124-17-4)	[OPTS-42113/42065C]
Fluoroalkenes (vinyl fluoride, vinylidene fluoride, tetrafluoroethene, and hexafluoropropene, CAS Nos. 75-02-5, 75-38-7, 116-14-3, and 116-15-4)	[OPTS-42113/42002I]
C9 Aromatic hydrocarbon fraction	[OPTS-42113/42034E]
Hydroquinone (CAS No. 123-31-9)	[OPTS-42113/42048E]
Tetrabromobisphenol A (CAS No. 79-94-7)	[OPTS-42113/42063B]
3,4-Dichlorobenzotrifluoride (CAS No. 328-84-7)	[OPTS-42113/42069A]
Methyl tertiary butyl ether (CAS No. 1634-04-4)	[OPTS-42113/42098B]

A. Anthraquinone

EPA approved a modification to the test rule in 40 CFR 799.500 for anthraquinone. The modification granted a 3-month extension of reporting deadlines for three Tier I tests. The deadline for final reports for water solubility, fish acute toxicity, and invertebrate acute toxicity tests was extended to October 21, 1988.

B. Biphenyl

EPA approved modifications to the test rule in 40 CFR 799.925 for biphenyl. Modifications to the study plans "Biphenyl: Flow-Through Chronic Toxicity Test with *Daphnia magna* Straus," and "Biphenyl: Embryo-Larval Toxicity Test with Rainbow Trout, *Salmo gairdneri* Richardson," include additions of dates and signatures, changes in personnel, and updated purity data on the test substance and trout diet. An additional modification to these study plans clarified the procedures for using acetone as a carrier for biphenyl in both tests.

EPA also approved modifications to the final study plan for the partitioning water/sediment testing and biodegradation testing of biphenyl. These included changes in personnel and minor clarifications describing the core-sampling equipment and solvent extraction procedures. Additional modifications to this study plan regarding coring equipment and chemicals used to perform the testing were approved. EPA approved the sponsor's request to divide the reporting phases for these studies differently; from partitioning, aerobic, and anaerobic studies, to river partitioning and aerobic studies, lake partitioning and aerobic studies, and anaerobic studies.

EPA approved changes in test schedules. The deadline for submission of the final report for anaerobic biodegradation testing was extended 8 weeks to October 7, 1988. The deadline

for submission of the final report from the river partitioning test was extended from April 15, 1988, to June 1, 1988. The deadline for submission of the final report for the lake partitioning test was extended from April 15, 1988, to July 15, 1988.

C. 1,2,4,5-Tetrachlorobenzene

EPA approved a modification to the test rule in 40 CFR 799.1054 for 1,2,4,5-tetrachlorobenzene. The modification allows a 3-month extension of the reporting deadline for submission of the final report for the reproductive effects and fertility study. The deadline was extended from January 21, 1989, to April 21, 1989.

D. Cresols

EPA approved modifications to the test rule in 40 CFR 799.1250 for cresols. Two extensions to the in vivo mammalian bone marrow cytogenetics test were granted. The first extended the reporting deadline 3 months, the second extended it an additional 2 months. The deadline for the final report was extended to February 1, 1989.

A 5-month extension of the reporting schedule for the morphologic transformation of mammalian cells in culture assay was granted. The deadline for the final report was extended to November 28, 1988.

E. 1,2-Dichloropropane

EPA approved modifications to the test rule in 40 CFR 799.1550 for 1,2-dichloropropane (1,2-DCP). The modifications to the oral/inhalation pharmacokinetics test included the following: Allow the use of a test substance that is slightly less than 99 percent pure; allow the use of prior repeated dosing studies in the selection of high dose gavage and inhalation concentrations, and state that overt toxicity need not be elicited by the single exposure given in the pharmacokinetics study; make intervals used for collection of excreta as described in the test guideline consistent with one another; allow determination of parent compound concentration in blood used in kinetic studies to be obtained from test animal groups F through H instead of groups C through E; and allow pooling of samples from each animal per time point for the analytical determination of parent compound and metabolite identification when determining biotransformation after oral and inhalation exposure. The deadline for submission of the final pharmacokinetics report was extended 5 months to April 19, 1988.

The modifications to the algal acute toxicity tests included the following: Allow the use of a 5-day test; require monitoring of algal growth on days 2, 3, 4 and 5; eliminate the requirement to measure the 1,2-DCP concentration associated with algae; eliminate the 30-minute transition period between light and dark cycles; allow hand shaking of culture flasks; and require reporting of the 5-day EC10, EC50 and EC90 and 95 percent confidence limits and, if they can be determined, the 2, 3, and 4 day EC50.s and confidence limits.

The modification to the dominant lethal assay extends the deadline for submission of the final report 6 months to May 19, 1988.

F. Diethylenetriamine

EPA approved modifications to the test rule in 40 CFR 799.1575 for diethylenetriamine (DETA). Modifications included changes in personnel, changes in instrumentation for tests, a modification to the purity of the test substance used in chemical fate testing and dermal absorption study plans, non-substantive technical modifications to the study plan for the 90-day subchronic dietary toxicity study, and substitution of test lots of DETA used in dermal absorption, in vitro cytogenetics, in vivo cytogenetics and the sex-linked recessive lethal test in *Drosophila melanogaster*.

EPA also approved modifications to test schedules for the DETA test rule. The deadline for submission of the dermal absorption final study was extended 6 months to May 19, 1988. The deadline for submission of the chemical fate test final reports was extended 6 months to March 20, 1988.

G. Diethylene Glycol Butyl Ether and Diethylene Glycol Butyl Ether Acetate

EPA approved modifications to the test rule in 40 CFR 799.1560 for diethylene glycol butyl ether and its acetate (DGBE and DGBA). The modifications permit use of test animals of both sexes in the dermal pharmacokinetics test, and require that four animals per sex per dose group shall be used in the determination of absorption, biotransformation and excretion.

H. Fluoroalkenes

EPA approved modifications to the test rule in 40 CFR 799.1700 for fluoroalkenes. In the CHO/HPRT gene mutation assay, EPA approved use of nitrogen as the negative control and diluting gas, a 10 L/min flow rate, and an 18- to 19-hour treatment time for the non-activated portion of the test. A modification to the test schedule, extending the deadline for submission of final reports from January 22, 1988, to May 16, 1988, was also approved.

In the sex-linked recessive lethal tests with vinyl fluoride and vinylidene fluoride, EPA approved two extensions of the deadline for submission of final reports. The deadline was extended to August 15, 1988.

In the dominant lethal assay, EPA approved two 3-month extensions of the deadline for submission of final reports for hexafluoropropene and vinyl fluoride. The deadline was extended to October 22, 1988.

In the mouse micronucleus cytogenetics assay, EPA approved the use of a single exposure of 6 hours with three sampling times in the testing regimen for tetrafluoroethene and vinylidene fluoride. Two modifications to the test schedule for vinylidene fluoride, extending the date for submission of the final report 1 month and 5 months respectively, were approved. The deadline was extended to November 22, 1988.

I. C9 Aromatic Hydrocarbon Fraction

EPA approved a modification to the test rule in 40 CFR 799.2375 for the C9 aromatic hydrocarbon fraction. The modification extends the required reproductive effects test from a two-generation to a three-generation study.

J. Hydroquinone

EPA approved modifications to the test rule in 40 CFR 799.2200 for hydroquinone. Standards for developmental toxicity testing and reproductive effects testing were modified to require the use of TSCA test guidelines, published on May 20, 1987 (52 FR 19056), instead of the previously specified protocols included as part of study plans submitted by industry on June 15, 1983.

Other modifications include: (1) Changes in housing of animals in the toxicokinetic test; (2) changes in examination of tissues in neuropathology designed to increase sensitivity of the test; (3) the use of special staining and tissue sections in the neuropathologic examination; (4) the addition of two animals per treatment group and the measurement of whole-brain weight on perfused tissue without requiring whole-brain length and width measurements; and (5) alterations in the procedures for fixation of tissues in the neuropathology studies. EPA also approved modifications to the neurotoxicity test schedules. A 120-day extension was approved. The deadline for submission of final reports was extended to November 11, 1988.

K. Tetrabromobisphenol A

EPA approved modifications to the test rule in 40 CFR 799.4000 for tetrabromobisphenol A. Deadlines for the biodegradation test in sediment/water, inherent biodegradation in soil tests, and bioconcentration in fish tests were extended 6 months to February 19, 1989.

The deadline for the acute algal toxicity test and the acute fish toxicity test was extended 3 months to November 19, 1988.

Modifications were made to the fish early life stage toxicity test. These included a change in feeding of test animals, a change in the concentration of dissolved oxygen in the dilution water, and changes in the photoperiod for the trout early life stage test.

L. 3,4-Dichlorobenzotrifluoride

EPA approved modifications to test schedules for 3,4-dichlorobenzotrifluoride (DCBTF); these schedules were specified in the consent order signed on June 10, 1987. This chemical is listed in the table of consent orders at 40 CFR 799.5000.

The modifications extended reporting deadlines for algal acute and ready biodegradability tests 3 months to June 9, 1988. They extended reporting deadlines for acute gammarid, fathead minnow, and rainbow trout tests 4 months to July 9, 1988.

M. Methyl Tertiary Butyl Ether

EPA approved modifications to the test standards for methyl tertiary butyl ether; these standards were specified in the consent order signed on March 16, 1988. This chemical is listed in the table of consent orders at 40 CFR 799.5000. The changes clarify when radioactive or non-radioactive test compounds may be used, and how and when the radioactive material should be measured after administration to the test animals.

II. Public Record

EPA has established a public record for this rulemaking (docket number OPTS-42113). The record includes the information considered by EPA in evaluating the requested modifications.

The record is available for inspection from 8 a.m. to 4 p.m., Monday through Friday, except legal holidays, in Rm. G-004, NE Mall, 401 M St., SW., Washington, DC 20460.

III. Other Regulatory Requirements

A. Executive Order 12291

Under Executive Order 12291, EPA must judge whether a rule is "major" and therefore subject to the requirement of a Regulatory Impact Analysis. This rule, listing modifications of test standards and schedules for tests required under test rules and testing consent agreements under the authority of section 4 of TSCA, is not major because it does not meet any of the criteria set forth in section 1(b) of the Order.

This rule was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291. Any written comments from OMB to EPA, and any EPA response to those comments, are included in the rulemaking record.

B. Regulatory Flexibility Act

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, Pub. L. 96-354, September 19, 1980), EPA is certifying that this rule will not have a significant impact on a substantial number of small businesses because the modifications listed in this rule have been made to expedite the development of test data and to reduce certain paperwork burdens associated with current regulations.

C. Paperwork Reduction Act

The information collection requirements associated with this rule have been approved by OMB under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* and have been assigned OMB control number 2070-0033.

EPA has determined that this rule does not change existing recordkeeping or reporting requirements nor does it impose any additional recordkeeping or reporting requirements on the public.

Send comments regarding this rule to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

List of Subjects in 40 CFR Part 799

Testing, Environmental protection, Hazardous substances, Chemicals, Recordkeeping and reporting requirements, Incorporation by reference.

Dated: June 19, 1989.

Victor J. Kimm,

Acting Assistant Administrator for Pesticides and Toxic Substances.

PART 799—[AMENDED]

Therefore, 40 CFR Part 799 is amended as follows:

1. The authority citation for Part 799 continues to read as follows:

Authority: 15 U.S.C. 2603, 2611, 2625.

2. In § 799.500, by revising paragraphs (c) (1)(ii)(A), (2)(ii)(A), and (3)(ii)(A) to read as follows:

§ 799.500 Anthraquinone.

* * * * *

(c) * * *

(1) * * *

(ii) * * *

(A) The water solubility tests shall be completed and the final results submitted to EPA within 15 months of the effective date of the final rule.

* * * * *

(2) * * *

(ii) * * *

(A) The fish acute toxicity tests shall be completed and the final results submitted to EPA within 15 months of the effective date of the final rule.

* * * * *

(3) * * *

(ii) * * *

(A) The invertebrate acute toxicity tests shall be completed and the final results submitted to EPA within 15 months of the effective date of the final rule.

* * * * *

3. In § 799.925, by revising paragraphs (c) (1)(ii), (2)(ii), (d) (1)(ii), (2) (ii) and (iii), (3) (ii) and (iii) to read as follows:

§ 799.925 Biphenyl.

* * * * *

(c) * * *

(1) * * *

(ii) *Test standard.* The test shall be conducted in accordance with the revised EPA-approved modified study plan submitted to EPA by the Biphenyl Work Group: "Embryo-Larval Toxicity Test with Rainbow Trout, *Salmo gairdneri* Richardson." This revised EPA-approved modified study plan, with modifications approved by EPA on August 7, 1987, and October 16, 1987, is available for inspection in EPA's OPTS Reading Room, Rm. NE G-004, 401 M St. SW., Washington, DC 20460. Copies of this study plan are available to the public in the OPTS reading room.

* * * * *

(2) * * *

(ii) *Test standard.* The test shall be conducted in accordance with the revised EPA-approved modified study plan submitted to EPA by the Biphenyl Work Group: "Flow-Through Chronic Toxicity Test with *Daphnia magna* Straus." This revised EPA-approved modified study plan, with modifications approved by EPA on August 7, 1987, and October 16, 1987, is available for inspection in EPA's OPTS Reading Room, Rm. NE G-004, 401 M St. SW., Washington, DC 20460. Copies of this

study plan are available to the public in the OPTS reading room.

* * * * *

(d) * * *

(1) * * *

(ii) *Test standard.* The testing shall be conducted in accordance with the revised EPA-approved modified study plan submitted to EPA by the Biphenyl Work Group: "Aerobic Biodegradation Study." This revised EPA-approved modified study plan, with modifications approved by EPA on October 13, 1987, is available for inspection in EPA's OPTS Reading Room, Rm. NE G-004, 401 M St. SW., Washington, DC 20460. Copies of this study plan are available to the public in the OPTS reading room.

* * * * *

(2) * * *

(ii) *Test standard.* The testing shall be conducted in accordance with the revised EPA-approved modified study plan submitted to EPA by the Biphenyl Work Group: "Anaerobic Biodegradation Study." This revised EPA-approved modified study plan, with modifications approved by EPA on October 13, 1987, is available for inspection in EPA's OPTS Reading Room, Rm. NE G-004, 401 M St. SW., Washington, DC 20460. Copies of this study plan are available to the public in the OPTS reading room.

(iii) *Reporting requirements.* The anaerobic biodegradation study with biphenyl shall be completed and a final report submitted to EPA within 64 weeks of the effective date of the final Phase II rule. Progress reports shall be submitted at 6-month intervals beginning 6 months after the effective date of the final Phase II rule.

(3) * * *

(ii) *Test standard.* The testing shall be conducted in accordance with the revised EPA-approved modified study plan submitted to EPA by the Biphenyl Work Group: "Partitioning Water/Sediment Study." This revised EPA-approved modified study plan, with modifications approved by EPA on October 13, 1987, is available for inspection in EPA's OPTS Reading Room, Rm. NE G-004, 401 M St., SW., Washington, DC 20460. Copies of this study plan are available to the public in the OPTS reading room.

(iii) *Reporting requirements.* The partitioning water/sediment testing shall be completed and a final report submitted to EPA BY June 1, 1988, for the river test, and by July 15, 1988, for the lake test. Progress reports shall be submitted to EPA at 6-month intervals beginning 6 months after the effective date of the final Phase II rule.

* * * * *

4. In § 799.1054, by revising paragraph (c)(1)(ii)(A) to read as follows:

§ 799.1054 1,2,4,5-Tetrachlorobenzene.

* * * * *

(c) * * *

(1) * * *

(ii) * * *

(A) The reproduction and fertility test shall be completed and the final results submitted to EPA within 32 months of the effective date of this final rule.

* * * * *

5. In § 799.1250, by revising paragraphs (c) (1)(iii)(A)(*1*) and (3)(iii)(A) to read as follows:

§ 799.1250 Cresols.

* * * * *

(c) * * *

(1) * * *

(iii) * * *

(A) * * *

(*1*) The *in vitro* and *in vivo* (conditional) tests shall be completed and the final results submitted to EPA within 12 and 19 months, respectively, of the effective date of the final Phase II test rule.

* * * * *

(3) * * *

(iii) * * *

(A) The morphologic transformation of mammalian cells in culture assay shall be completed and final results submitted to EPA within 17 months of the effective date of the final Phase II test rule.

* * * * *

6. In § 799.1550, by revising paragraphs (c) (2)(iii)(A), (5) (ii) and (iii)(A), and (d)(2)(ii) to read as follows:

§ 799.1550 1,2-Dichloropropane.

* * * * *

(c) * * *

(2) * * *

(iii) * * *

(A) The dominant lethal assay shall be completed and the final report submitted to EPA within 18 months of the effective date of the final Phase II rule.

* * * * *

(5) * * *

(ii) *Test standard.* (A) The oral and inhalation pharmacokinetic testing with 1,2-dichloropropane shall be conducted in accordance with § 795.230 of this chapter, except for the provisions in paragraphs (c)(2) (i), (ii) (A) and (B), (iii) (C) and (D), and (3)(ii) of § 795.230.

(B) For the purpose of this section, the following provisions also apply:

(*1*) *Test Substance.* The studies require the use of both non-radioactive and ^{14}C-labeled test substance. The non-radioactive test substance shall be at least 99 percent pure, while the radiochemical purity of the ^{14}C-labeled test substance may be slightly less than 99 percent. Both preparations are needed to investigate the provisions of paragraph (a)(2) of this section. The use of ^{14}C-test substance is recommended for the provisions in paragraph (a)(1), (2), and (3) of this section in order to facilitate the work, improve the reliability of quantitative determinations, and increase the probability of observing previously unidentified metabolites.

(*2*) *Oral study.* At least two doses shall be used in the study, a "low" and "high" dose. When administered orally, the "high" doses should induce some overt toxicity such as weight loss. If data from prior repeated dosing studies is utilized to select the "high" dose, overt toxicity need not be elicited in this exposure group. The "low" dose shall not induce observable effects attributable to the test substance. Oral dosing shall be performed by gavage using an appropriate vehicle.

(*3*) *Inhalation study.* Three concentrations shall be used in the study. Upon exposure, two higher concentrations should ideally induce some overt symptoms of toxicity, although the intermediate concentration may be excluded from this condition. If data from prior repeated dosing studies is utilized to select the high dose, overt toxicity need not be elicited in this exposure group. The lowest concentration shall not induce observable effects attributable to the test substance.

(*4*) *Collection of excreta.* After oral administration (Groups A and B) and inhalation exposure (Groups F through H) the rats shall be placed in individual metabolic cages and excreta (urine, feces and expired air) shall be collected from 0 to 24 hours and from 24 to 48 hours after dosing and, if necessary, daily thereafter until at least 90 percent of the dose has been excreted or until 7 days after dosing, whichever occurs first.

(*5*) *Kinetic studies.* Groups C through E should be used to determine the concentration of the test substance in blood at 0, 5, 10, 15, and 30 minutes, and at 1, 2, 4, 8, 16, 24, and 48 hours after initiation of inhalation exposure. If experimentally feasible, blood obtained from the ^{14}C-exposed rats from Groups F through H may be used to determine the test substance concentrations.

(*6*) *Biotransformation after oral and inhalation exposure.* Appropriate qualitative and quantitative methods shall be used to assay urine specimens collected from each rat in Groups A and

B and F through H. The radiometric analyses of urine, feces and expired air should be conducted individually for each rat, but samples from each rat per time point may be pooled for analytical determination of parent compound and metabolite identification. Metabolite identification shall be attempted for those routes of excretion which contain greater than 10 percent of the oral dose or, in the inhalation study, greater, than 10 percent of the body burden at the end of exposure.

(iii) * * *

(A) The pharmacokinetic test shall be completed and the final report submitted to EPA within 17 months of the effective date of the final single-phase pharmacokinetics rule.

* * * * *

(d) * * *

(2) * * *

(ii) *Test standard.*

(A) The algal acute toxicity tests with 1, 2-dichloropropane shall be conducted with marine and freshwater algae using systems that control for 1,2-dichloropropane evaporation in accordance with § 797.1050 of this chapter, except for the provisions in paragraph (c)(1)(ii), (3)(iii), (4)(iv), (6)(i)(B), (d)(3)(ii) and (iii), (e)(4) and (5) of § 797.1050.

(B) For the purpose of this section, the following provisions shall also apply to the algal acute toxicity tests:

(*1*) At 48, 72, 96, and 120 hours, enumerate the algal cells in all containers to determine the inhibition or stimulation of growth in test containers compared to controls. Use data to define the concentration-response curve, and calculate the EC_{10}, EC_{50}, and EC_{90} values.

(*2*) The test is performed once for each of the recommended algal species or selected alternates. Test chambers should contain equal volumes of test solution and approximately 1×10^4 *Selenastrum* cells/ml or 7.7×10^4 *Skeletonema* cells/ml of test solution. The algae should be exposed to each concentration of test chemical for up to 120 hours. The exposure period may be shortened if data suitable for the purposes of the range-finding tests can be obtained in less time.

(*3*) The test begins when algae from 7 to 10-day-old stock cultures are placed in the test chambers containing test solutions having the appropriate concentrations of the test substance. At the end of 120 hours, the algal growth response (number or weight of algal cells/ml) in all test containers and controls should be determined by an indirect (spectrophotometry, electronic cell counters, dry weight, etc.) or a direct (actual microscopic cell count) method. Indirect methods should be calibrated by a direct microscopic count. The percentage inhibition of stimulation of growth for each concentration, EC_{10}, EC_{50}, EC_{90}, and the concentration-response curves are determined from these counts.

(*4*) At the end of the test and after aliquots have been removed for algal growth-response determinations, microscopic examination, mortal staining, or subculturing, the replicate test containers for each chemical concentration may be pooled into one sample. An aliquot of the pooled sample may then be taken and the concentration of test chemical determined. In addition, the concentration of test chemical associated with the algae alone should be determined. Separate and concentrate the algal cells from the test solution by centrifuging or filtering the remaining pooled sample and measure the test substance concentration in the algal-cell concentrate. The concentrations associated with the algae do not have to be measured if data are provided that demonstrate that substantive amounts of the test substance are lost during transfer of algae to centrifuge tubes or during centrifugation.

(*5*) Test chambers containing *Selenastrum* shall be illuminated continuously and those containing *Skeletonema* shall be provided a 14-hour light and 10-hour dark photoperiod under fluorescent lamps providing $300 \pm 25 uEin/m^2$ sec (approximately 400 ft-c) measured adjacent to the test chambers at the level of test solution.

(*6*) Stock algal cultures should be shaken twice daily by hand. Test containers may be shaken by hand or placed on a rotary shaking apparatus and oscillated at approximately 100 cycles/minute for *Selenastrum* and at approximately 60 cycles/minute for *Skeletonema* during the test. The rate of oscillation should be determined at least once daily during testing.

(*7*) The number of algal cells per milliliter in each treatment and control and the method used to derive these values at the beginning, 48, 72, and 96 hours, and end of the test; the percentage of inhibition or stimulation of growth relative to controls; and other adverse effects in the control and in each treatment.

(*8*) The 120-hour EC_{10}, EC_{50}, and EC_{90}, values, and when sufficient data have been generated, the 48, 72, and 96 hour LC_{50}'s and 95 percent confidence limits, the methods used to derive these values, the data used to define the shape of the concentration-response curve and the goodness-of-fit determination.

* * * * *

7. In § 799.1575, by revising paragraphs (c)(1)(ii), (2)(ii), (3)(ii), (4)(ii), and (d)(2) to read as follows:

§ 799.1575 Diethylenetriamine (DETA).

* * * * *

(c) * * *

(1) * * *

(ii) *Test standards.* (A) The testing for the sex-linked recessive lethal assay shall be conducted in accordance with the following revised EPA-approved modified study plan (June 19, 1986) originally submitted by the Diethylenetriamine Producers/Importers Alliance (DPIA): "Sex-linked recessive lethal test in *Drosophila melanogaster*," with modifications as approved by EPA on March 9, 1987, and May 21, 1987.

(B) The testing for the mouse visible specific locus assay shall be conducted in accordance with the following revised EPA-approved modified study plan (June 19, 1986) originally submitted by the Diethylenetriamine Producers/Importers Alliance (DPIA): "Mouse specific locus test for visible markers."

(C) These revised EPA-approved modified study plans are available for inspection in EPA's OPTS Reading Room, Rm. NE-G004, 401 M St., SW., Washington, DC 20460.

* * * * *

(2) * * *

(ii) *Test standards.* (A) The testing for cytogenetic effects shall be conducted in accordance with the following revised EPA-approved modified study plan (June 19, 1986) originally submitted by the Diethylenetriamine Producers/Importers Alliance (DPIA): "*In vitro* cytogenetics test" and "*In vivo* cytogenetics test," with modifications as approved by EPA on March 9, 1987, and May 21, 1987.

(B) Other testing for cytogenetic effects shall be conducted in accordance with the following revised EPA-approved modified study plans (June 19, 1986) originally submitted by the Diethylenetriamine Producers/Importers Alliance (DPIA): "Dominant lethal assay of diethylenetriamine in CD rats," and "Heritable translocation of diethylenetriamine in CD-1 mice."

(C) These revised EPA-approved modified study plans are available for inspection in EPA's OPTS Reading Room, Rm. NE-G004, 401 M St., SW., Washington, DC 20460.

* * * * *

(3) * * *

(ii) *Test Standard.* The testing shall be conducted in accordance with the following revised EPA-approved

modified study plans (June 19, 1986) originally submitted by the Diethylenetriamine Producers/Importers Alliance (DPIA): "Ninety-Day (subchronic) dietary toxicity study with diethylenetriamine in albino rats," with modifications approved by EPA on March 9, 1987, and May 21, 1987. This revised EPA-approved modified study plan is available for inspection in EPA's OPTS Reading Room, Rm. NE-G004, 401 M St., SW., Washington, DC 20460.

* * * * *

(4) * * *

(ii) *Test standard.* The testing shall be conducted in accordance with the following revised EPA-approved modified study plan (June 19, 1986) originally submitted by the Diethylenetriamine Producers/Importers Alliance (DPIA): "Dermal absorption," with modifications approved by EPA on March 9, 1987, May 21, 1987, and December 16, 1987. This revised EPA-approved modified study plan is available for inspection in EPA's OPTS Reading Room, Rm. NE-G004, 401 M St., SW., Washington, DC 20460.

* * * * *

(d) * * *

(2) *Test standard.* The testing shall be conducted in accordance with the following revised EPA-approved modified study plan (June 19, 1986) originally submitted by the Diethylenetriamine Producers/Importers Alliance (DPIA): "Chemical fate," with modifications approved by EPA on March 9, 1987, May 21, 1987, July 9, 1987, and December 16, 1987. This revised EPA-approved modified study plan is available for inspection in EPA's OPTS Reading Room, Rm. NE-G004, 401 M St., SW., Washington, DC 20460.

* * * * *

8. In § 799.1560, by revising paragraph (c)(4)(i) to read as follows:

§ 799.1560 Diethylene glycol butyl ether and diethylene glycol butyl ether acetate.

* * * * *

(c) * * *

(4) * * *

(i) *Required testing.* (A) Pharmacokinetics testing of DGBE and DGBA will be conducted in rats by the dermal route of administration in accordance with § 795.225 of this chapter, except for the provisions in paragraphs (b) (1)(ii) and (3)(i) of § 795.225.

(B) For the purpose of this section, the following provisions also apply:

(*1*) *Animals.* Adult male and female Sprague Dawley rats shall be used. The rats shall be 7 to 8 weeks old and weigh 180 to 220 grams. Prior to testing, the animals shall be selected at random for each group. Animals showing signs of ill health shall not be used.

(*2*) *Observation of animals—Urinary and fecal excretion.* The quantities of ^{14}C excreted in urine and feces by rats dosed as specified in paragraph (b)(2)(iv) of § 795.225 shall be determined at 8, 24, 48, 72, and 96 hours after dosing, and if necessary, daily thereafter until at least 90 percent of the dose has been excreted or until 7 days after dosing (whichever occurs first). Four animals per sex per dose group shall be used for this purpose.

* * * * *

9. In § 799.1700, by revising paragraphs (c) (1) (i)(A)(*2*) (*iv*) and (*vi*), (ii)(A), (2) (i)(A)(*2*)(*iii*) and (ii)(A) to read as follows:

§ 799.1700 Fluoroalkenes.

* * * * *

(c) * * *

(1) * * *

(i) * * *

(A) * * *

(*2*) * * *

(*iv*) *Test method—Control groups.* Positive and negative controls shall be included in each experiment. In assays with metabolic activation, the positive control substance shall be known to require such activation. Nitrogen shall serve as the negative control and diluting gas.

* * * * *

(*vi*) *Test performance.* Cells in treatment medium with and without metabolic activation shall be exposed to varying concentrations of test gas-air mixtures by flushing treatment flasks (or chambers) with 10 volumes of test gas-air mixture at a rate of 500 mL/min or that rate which will allow complete flushing within 1 minute. In the case of a test chamber volume of 1.67 L, a flow rate of 10 L/min is appropriate. Each flask shall be closed with a cap with a rubber septum. Headspace samples shall be taken at the beginning and end of the exposure period and analyzed to determine the amount of test gas in each flask. Flasks shall be incubated on a rocker panel at 37 °C for 5 hours for tests with metabolic activation. For the non-activated portion of the test, the incubation time shall be 18 to 19 hours at 37 °C. At the end of the exposure period, cells treated with metabolic activation shall be washed and incubated in culture medium for 21 to 26 hours prior to subculturing the viability and expression of mutant phenotype. Cells treated without metabolic activation shall be washed and subcultured immediately to determine viability and to allow for expression of mutant phenotype. Appropriate subculture schedules (generally twice during the expression period) shall be used. At the end of the expression period, which shall be sufficient to allow near optimal phenotypic expression of induced mutants (generally 7 days for this cell system), cells shall be grown in medium with and without selective agent for determination of numbers of mutants and cloning efficiency, respectively. This last growth period is generally 7 days at 37 °C. Results of this test shall be confirmed in an independent experiment.

* * * * *

(ii) * * *

(A) Mutagenic effects-gene mutation tests shall be completed and the final results submitted to EPA as follows: Somatic cells in culture assay, by May 16, 1988; *Drosophila* sex-linked recessive lethal, by August 15, 1988 (for VF and VDF), and within 15 months (for TFE and HFP) after the effective date of the final rule; mouse visible specific locus assay, within 51 months after the date of EPA's notification of the test sponsor by certified letter or **Federal Register** notice that testing shall be initiated.

* * * * *

(2) * * *

(i) * * *

(A) * * *

(*2*) * * *

(*iii*) *Test method—route of administration.* Animals shall be exposed by inhalation with a single 6-hour exposure, with three sampling times between 29 and 72 hours.

* * * * *

(ii) * * *

(A) Mutagenic effects-chromosomal aberration testing shall be completed and final results submitted to EPA after the effective date of the rule as follows: mouse micronucleus cytogenetics for VDF by November 22, 1988, and for TFE within 10 months after the effective date of the final rule; dominant lethal assay for VF and HFP by October 22, 1988, and for VDF and TFE within 19 months after the effective date of the rule; heritable translocation assay, within 25 months after the date of EPA's notification of the test sponsor by certified letter or **Federal Register** notice that testing shall be initiated.

* * * * *

10. In § 799.2175, by revising paragraph (e)(1)(i) to read as follows:

§ 799.2175 C9 aromatic hydrocarbon fraction.

* * * * *

(e) * * *

(1) * * *

(i)(A) The required testing specified in paragraphs (d) (1), (2), (3), and (4) of this section shall be conducted in accordance with the study plans for testing the C9 fraction developed by the American Petroleum Institute (API), submitted to EPA on September 30, 1985, modified in a submission dated January 10, 1986, and the additional requirements specified in this paragraph.

(B) The required testing specified in paragraph (d)(5) of this section shall be conducted in accordance with the study plans for testing the C9 fraction developed by the American Petroleum Institute (API), submitted to EPA on September 30, 1985, and modified in submissions dated January 10, 1986, and September 13, 1988.

* * * * *

11. In § 799.2200, by revising paragraphs (c) (1)(ii), (2)(ii), (3)(ii), (4) (ii) and (iii)(A) to read as follows:

§ 799.2200 Hydroquinone.

* * * * *

(c) * * *

(1) * * *

(ii) *Test standard.* (A) The toxicokinetic testing shall be conducted in accordance with § 795.235 of this chapter except for the provisions in paragraph (c)(1)(iii)(C) of § 795.235.

(B) For the purpose of this section, the following provisions also apply:

(*1*) During the acclimatization period, rats shall be housed in polycarbonate cages on hardboard chip bedding, or suspended steel cages with no bedding material.

(*2*) [Reserved]

* * * * *

(2) * * *

(ii) *Test standards.* The developmental toxicity testing shall be conducted in accordance with § 798.4900, as revised July 1, 1987.

* * * * *

(3) * * *

(ii) *Test standards.* The reproductive effects testing shall be conducted in accordance with § 798.4700, as revised July 1, 1987.

* * * * *

(4) * * *

(ii) *Test standards.* (A) The neurotoxicity testing of hydroquinone, consisting of a functional observational battery and neuropathology, shall be conducted in accordance with §§ 798.6050 and 798.6400, respectively, of this chapter, except for the provisions of paragraphs (d)(8) (ii) (C) and (D), (iv) (A), and (E)(2) of § 798.6400. The functional-observational battery and the neuropathology assessment may be conducted sequentially on the same group of rats. Neuropathological assessment should begin with the highest dose level and work downward until a no-observable-adverse-effects dose is reached.

(B) For the purpose of § 798.6400, the following provisions also apply:

(*1*) *Removal of brain and cord.* After perfusion, the bony structure (cranium and vertebral column) should be exposed. Animals should then be stored in fixative-filled bags at 4 °C for 8–12 hours. The cranium and vertebral column shall be removed carefully by trained technicians without physical damage of the brain and cord. Detailed dissection procedures may be found in the text by Palay and Chan-Palay (1974) under paragraph (f)(4) of this section. After removal, simple measurement of the weight of the whole brain (cerebrum, cerebellum, pons-medulla) should be made. Any abnormal coloration or discoloration of the brain and cord should also be noted and recorded.

(*2*) *Sampling.* Unless a given test rule specifies otherwise, cross-sections of the following areas shall be examined: The forebrain, the center of the cerebrum, the midbrain, the cerebellum and pons, and the medulla oblongata; the spinal cord at cervical and lumbar swelling (C3–C8 and L1–L4); dorsal root ganglia (C3–C8 and L1–L4), dorsal and ventral root fibers (C3–C8 and L1–L4), sciatic nerve (mid-thigh) and tibial nerve (at knee). The aforementioned areas will be examined with special stains (a combined Luxol Fast Blue Stain-Bodian Silver Protargol impregnation).

(*3*) *Histopathology examination.* Tissue specimens stored in 10 percent buffered formalin may be used for this purpose. All tissues must be immersion-fixed in fixative for at least 48 hours prior to further tissue processing. Alternative fixation procedures may be employed. Tissues for plastic embedment may be fixed for an additional period of at least 2 hours in glutaraldehyde. Tissues from perfused animals not destined for plastic embedment and all tissues from unperfused animals may be fixed in 10 percent neutral buffered formalin.

(*4*) *Special stains.* Regardless of the results of the general staining, selected sites and cellular components shall be further evaluated by the use of certain special stains (a combined Luxol Fast Blue Stain-Bodian Silver Protargol impregnation) and plastic embedded 1 micron sections. These stains and sections shall be used to detect chemical-induced damage to neuronal body, axon, myelin sheath and neurofibrils. A section of normal tissue shall be included in each staining to assure that adequate staining has occurred. Any changes shall be noted and representative photographs shall be taken. If a lesion(s) is observed, the special techniques shall be repeated in the next lower treatment group until no further lesion is detectable.

(iii) * * *

(A) The neurotoxicity tests shall be completed and final results submitted to EPA within 16 months of the effective date of the final Phase II rule.

* * * * *

12. In § 799.4000, by revising paragraphs (c)(1)(ii)(A), (2)(ii)(A), (d)(1)(ii)(A), (2)(ii)(A), (5), and (6)(ii)(A) to read as follows:

§ 799.4000 Tetrabromobisphenol A.

* * * * *

(c) * * *

(1) * * *

(ii) * * *

(A) The biodegradation test in sediment/water shall be completed and the final report submitted to EPA within 18 months of the effective date of the final rule.

* * * * *

(2) * * *

(ii) * * *

(A) The inherent biodegradability in soil tests shall be completed and the final reports submitted to EPA within 18 months of the effective date of the final rule.

* * * * *

(d) * * *

(1) * * *

(ii) * * *

(A) The algal acute toxicity test shall be completed and the final report submitted to EPA within 15 months of the effective date of the final rule.

* * * * *

(2) * * *

(ii) * * *

(A) The fish acute toxicity test shall be completed and the final report submitted to EPA within 15 months of the effective date of the final rule.

* * * * *

(5) *Fish early life stage toxicity.*—(i) *Required testing.* (A) A fish early life stage toxicity test shall be conducted with TBBPA. The test species shall be fathead minnow (*Pimephales promelas*) if the 96-hour LC_{50} for fathead minnow conducted in accordance with paragraph (d)(2) of this section is equal to or less than 0.8 mg/L; the test species shall be either fathead minnow or rainbow trout if the 96-hour LC_{50} for fathead minnow is between 0.66–2.0 mg/L; the test species shall be rainbow trout if the 96-hour LC_{50} for fathead minnow is greater than or equal to 2.0 mg/L. The fish early life stage toxicity test shall be

conducted in accordance with § 797.1600 of this chapter, except for the provisions in paragraphs (c)(4)(iv)(A), (d)(2)(vii)(A)(2), (3)(i) and (ii)(B)(1), and (iv)(A) of § 797.1600.

(B) For the purpose of this section, the following provisions also apply:

(1) The first feeding for the fathead and sheepshead minnow fry shall begin shortly after transfer of the fry from the embryo cups to the test chambers. Silversides are fed the first day after hatch. Trout species initiate feeding at swim-up. The trout fry shall be fed trout starter mash or live newly-hatched brine shrimp nauplii (*Artemia salina*) three times a day *ad libitum*, with excess food siphoned off daily. The minnow fry shall be fed *Artemia salina* at least three times a day.

(2) The concentration of dissolved oxygen in the dilution water (fresh or salt) shall be greater than 75 percent of air saturation. When necessary, dilution water should be aerated by means of airstones, surface aerators, or screen tubes before the introduction of the test substance.

(3) Dissolved oxygen concentration. It is recommended that the dissolved oxygen concentration be maintained between 90 and 100 percent saturation; but it shall be no less than 75 percent saturation at all times for both minnow species, silversides, and the trout species in all test chambers. Dilution water in the head box may be aerated, but the test solution itself shall not be aerated.

(4) The concentration of dissolved oxygen shall not fall below 75 percent saturation for the fathead and sheepshead minnows and for the rainbow and brook trout.

(5) Brook and rainbow trout embryos shall be maintained in darkness or very low light intensity through 1-week post-hatch, at which time a 16-hour light and 8-hour dark photoperiod shall be provided.

* * * * *

(6) * * *

(ii) * * *

(A) The bioconcentration test in fish shall be completed and the final report submitted to EPA within 18 months after the effective date of the final rule.

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[FR Doc. 89-15271 Filed 6-28-89; 8:45 am]

BILLING CODE 6560-50-M

FEDERAL EMERGENCY MANAGEMENT AGENCY

44 CFR Part 64

[Docket No. FEMA 6837]

List of Communities Eligible for the Sale of Flood Insurance

AGENCY: Federal Emergency Management Agency, FEMA.

ACTION: Final rule.

SUMMARY: This rule lists communities participating in the National Flood Insurance Program (NFIP). These communities were required to adopt floodplain management measures compliant with the NFIP revised regulations that became effective on October 1, 1986. If the communities did not do so by the specified date, they would be suspended from participation in the NFIP. The communities are now in compliance. This rule withdraws the suspension. The communities' continued participation in the program authorizes the sale of flood insurance.

EFFECTIVE DATE: As shown in fifth column.

ADDRESS: Flood insurance policies for property located in the communities listed can be obtained from any licensed property insurance agent or broker serving the eligible community, or from the NFIP at: P.O. Box 457, Lanham, Maryland 20706, Phone: (800) 638-7418.

FOR FURTHER INFORMATION CONTACT: Frank H. Thomas, Assistant Administrator, Office of Loss Reduction, Federal Insurance Administration, (202) 646-2717, Federal Center Plaza, 500 C Street, Southwest, Room 416, Washington, DC 20472.

SUPPLEMENTARY INFORMATION: The NFIP enables property owners to purchase flood insurance at rates made reasonable through a Federal subsidy. In return, communities agree to adopt and administer local floodplain management measures aimed at protecting lives and new construction from future flooding.

In addition, the Director of the Federal Emergency Management Agency has identified the Special Flood Hazard Areas in these communities by publishing a Flood Insurance Rate Map. In the communities listed where a flood map has been published, Section 102 of the Flood Disaster Protection Act of 1973, as amended, requires the purchase of flood insurance as a condition of Federal or federally related financial assistance for acquisition or construction of buildings in the Special Flood Hazard Area shown on the map.

The Director finds that the delayed effective dates would be contrary to the public interest. The Director also finds that notice and public procedure under 5 U.S.C. 553(b) are impracticable and unnecessary.

The Catalog of Domestic Assistance Number for this program is 83.100 "Food Insurance."

Pursuant to the provisions of 5 U.S.C. 605(b), the Administrator, Federal Insurance Administration, to whom authority has been delegated by the Director, Federal Emergency Management Agency, hereby certifies that this rule, if promulgated will not have a significant economic impact on a substantial number of small entities. This rule provides routine legal notice stating the community's status in the NFIP and imposes no new requirements or regulations on these participating communities.

List of Subjects in 44 CFR Part 64

Flood insurance and floodplains.

PART 64—[AMENDED]

1. The authority citation for Part 64 continues to reads as follows:

Authority: 42 U.S.C. 4001 et. seq., Reorganization Plan No. 3 of 1978, E.O. 12127.

2. Section 64.6 is amended by adding in alphabetical sequence new entries to the table.

In each entry, the suspension for each listed community has been withdrawn. The entry reads as follows:

§ 64.6 List of Eligible Communities.

State	Community name	County	Community No.	Effective date
Colorado	Akron, town of	Washington	080177	June 19, 1989, suspension withdrawn.
Do	Buena Vista, town of	Chaffee	080030	Do.
Do	Unincorporated areas	Clear Creek	080034	Do.
Do	Crested Butte, town of	Gunnison	080079	Do.
Do	Erie, town of	Weld	080181	Do.
Do	Fort Morgan, city of	Morgan	080131	Do.